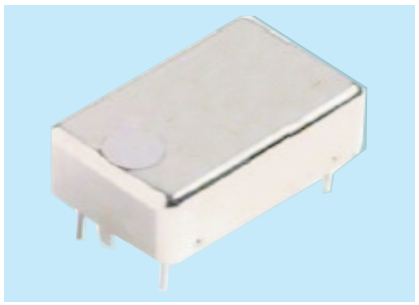
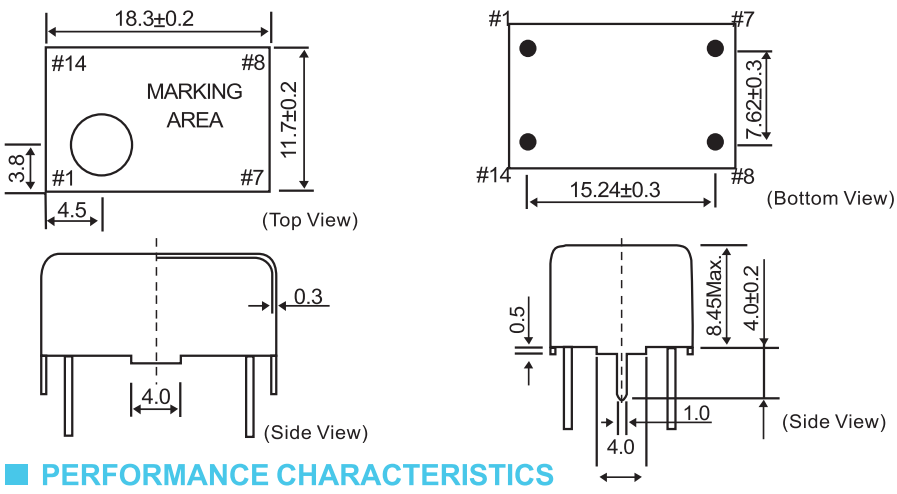
Products Information

TC18



DESCRIPTION:

- Stability up to ±0.5×10^{-6}
- Control Voltage Range ±10×10^{-6} Max.
- TTL/HCMOS Output
- Good Phase Noise
- 14PIN Package
- SDH/SONET
- ATM
- WLL
- Measurement Equipment



PIN	FUNCTION
#1	VC/NC
#7	GND
#8	OUTPUT
#14	+DC

PERFORMANCE CHARACTERISTICS

Parameter			Condition	TC18B	
Frequency Range		F_0		1.200MHz~50.000MHz	
Frequency Stability			All Condition	See Next Table	
Operating Temperature Range		T_{OPR}		See Next Table	
Supply Voltage		V_{DD}		B:+5.0VDC± 10%	A:+3.3VDC±10%
Supply Current		I_{DD}	1.25M≤F_0<15M	20mA Max.	15mA Max.
			15M≤F_0<36M	30mA Max.	25mA Max.
			36M≤ F_0<50M	40mA Max.	32mA Max.
Output Load				A: TTL 15pF	C: CMOS 15pF D: CMOS 50pF
Output Duty			1.4V or 1/2V_{DD}	45%~55%	
Control Voltage Range				See Ordering Information	
Frequency Stability	Supply Voltage change		±5%	±0.2×10^{-6}	
	Load change		±10%	±0.2×10^{-6}	
Vs	Aging			±1×10^{-6}/year	
Rise Time		Tr	0.4V~2.4V 10%V_{DD}~90%V_{DD}	10nS Max.	
Fall Time		Tf	2.4V~0.4V 90%V_{DD}~10%V_{DD}	10nS Max.	
Output Level	"0"Level	V_{OL}		0.4V Max. or 10%V_{DD}	
	"1"Level	V_{OH}		2.4V Min. or 90%V_{DD}	
Vc Input Impedance				100KΩ	
Start-Up Time		Ts		2mS Max.	
Storage Temperature Range		T_{STG}		-55°C~+125°C	

Products Information

TC18

FREQUENCY STABILITY OVER TEMPERATURE RANGE

Temperature Range	Frequency Stability					
	H:±0.5×10^{-6}	I:±1.0×10^{-6}	J:±1.5×10^{-6}	K ±2.0×10^{-6}	L: ±2.5×10^{-6}	N:±5.0×10^{-6}
A:0°C~+50°C	●	●	●	●	●	●
B:-10°C~+60°C	●	●	●	●	●	●
C:-20°C~+70°C		●	●	●	●	●
D:-30°C~+75°C		●	●	●	●	●
G:-40°C~+85°C		●	●	●	●	●

ORDERING INFORMATION

VC | 75P — T | A | C | R | P — 155.52 MHz

Product Family
VC= VCXO

Package
75P= 7.0×5.20×1.80 mm

Control Voltage Range
T= ±50×10^{-6} **U**= ±100×10^{-6}
Vcon range: 0.3V~3.0V @ 3.3V VDD
Tolerance: Vcon: 1.65V @ 3.3V VDD
(25°C)

Supply Voltage
A= +3.3VDC

Frequency
77.76MHz~212.5MHz

Output Waveform
P= PECL

Frequency Stability
R= ±25×10^{-6}
T= ±50×10^{-6}
U= ±100×10^{-6}

Temperature
A= 0°C~+50°C
B= -10°C~+60°C
C= -20°C~+70°C
G= -40°C~+85°C

ORDERING EXAMPLE

VC75P-TACRP-155.52MHz
VCXO / Pulling Range: ±50×10^{-6} / +3.3VDC / -20°C~+70°C / Frequency Stability: ±25×10^{-6} / PECL / 155.52MHz